AMENDMENTS TO THE CLAIMS

1. A braking mechanism for a skate, the skate having a base skating surface with a base skating surface longitudinal axis, the braking mechanism comprising:

(a) at least one braking wheel disposed above the base skating surface, the at least one braking wheel being rotatable about a braking wheel axis disposed in a vertical plane, the vertical plane intersecting the base skating surface longitudinal axis at an angle of between about -20° and about +20°;

(b) a piston housing having piston housing side walls, a first piston housing section proximal to a first piston housing end and a second piston housing section distal to the first piston housing end, the first piston housing section defining a plurality of first piston housing section side wall apertures, the first piston housing section side wall apertures being disposed at a plurality of different distances from the piston housing first end, the second piston housing section comprising one or more second piston housing section side wall apertures;

(c) a piston disposed within the piston housing, the piston having a first end and a second end, the first end comprising an internal piston flow channel and a slide valve disposed in the first end of the piston for controlling the flow of liquid from the piston flow channel to the first piston housing section, the piston further comprising one or more piston inlet channels for allowing the flow of liquid into the piston flow channel from the second piston housing section, the piston being mechanically connected to the at least one braking wheel such that the rotation of the at least one braking wheel moves the piston within the piston housing between (i) a first piston position wherein the piston is distal from the first piston housing end and wherein the piston is not adjacent to the first piston housing section side wall apertures, and (ii) a second piston position wherein the piston is proximal to the first piston housing end and the piston is adjacent to some or all of

the first piston housing section side wall apertures, the slide valve being adapted to close when the piston is moved from the first piston position to the second piston position and to open when the piston is moved from the second piston position to the first piston position;

(d) a first biasing mechanism for urging the piston towards the first piston position;

(e) sealing means for sealing the piston within the piston housing such that (i) liquid disposed in the first piston housing section cannot leak around the piston to the second piston housing section, and (ii) when the piston is moved adjacent to one of the plurality of first piston housing section side wall apertures, liquid disposed in the first piston housing section cannot leak around the piston and out through that first piston housing section side wall aperture; and

(f) an external flow channel having a first end a second end, the first end of the external flow channel being in fluid tight communication with the first piston housing section via the first piston housing section side wall apertures, the second end of the external flow channel being in fluid tight communication with the second piston housing section via the second piston housing section side wall apertures;

whereby, (i) when a liquid is disposed within the first piston housing section, the application of an axial force to the braking wheel causes the rotation of the at least one braking wheel and its braking wheel axis to thereby move the piston from the first piston position towards the second piston position, the slide valve is closed and the piston pressurizes liquid out of the first piston housing section via the first piston housing section side wall apertures, and into the second piston housing section via the second piston housing section side wall apertures, and (ii) when the axial force on the at least one braking wheel is released, the first biasing means urges the piston from the second piston position towards the first piston position, the slide valve is opened and liquid returns to the first piston housing section from the second piston housing section via the piston flow channel.

2. The braking mechanism of claim 1 wherein the at least one braking wheel is rotatable about a braking wheel axis disposed in a vertical plane, the vertical plane intersecting the base skating surface longitudinal axis at an angle of between about -5° and about +5°.

3. The braking mechanism of claim 1 wherein the first piston housing end defines a piston housing end aperture and the first end of the external flow channel is in fluid tight communication with the piston housing end aperture.

4. The braking mechanism of claim 3 wherein the first end of the piston further comprises a tapered projection aligned with the piston housing end aperture such that, when the piston is disposed in the second piston position, the tapered projection is disposed within the piston housing end aperture.

5. The braking mechanism of claim 4 wherein, when the piston is disposed in the second piston position, the tapered projection seals closed the piston housing end aperture.

6. The braking mechanism of claim 1 wherein the piston flow channel has an open end at the first end of the piston and wherein the slide valve comprises a slidable plug slidably disposed and retained within the piston flow channel, the slidable plug comprising an elongate body and an end cap, the slidable plug being slidable between a first plug position wherein the end cap covers the open end of the piston flow channel and a second plug position wherein the end cap does not cover the open end of the piston flow channel.

7. The braking mechanism of claim 6 further comprising a second biasing mechanism for urging the slidable plug to the first plug position, the second biasing mechanism being weaker than the first biasing mechanism.

8. The braking mechanism of claim 1 wherein the first biasing means is a coil spring disposed within the first piston housing section and the second biasing means is a coil spring disposed within the piston flow channel.

9. The braking mechanism of claim 1 wherein the first piston position can be adjusted by axially moving the second end of the piston.

10. The braking mechanism of claim 3 wherein the piston housing is disposed coaxially within an elongate body, the elongate body having a first end and a second end, the first end of the piston housing being disposed proximate to the first end of the elongate body, the piston housing being axially moveable with respect to the elongate body between (i) a first piston housing position wherein the first end of the piston housing is not in abutment with the elongate body such that a channel is defined between the piston housing and the elongate body which connects the piston housing end aperture in fluid tight communication with the external flow channel and (ii) a second piston housing position wherein the first end of the piston housing is in abutment with the elongate body and no flow channel exists connecting the piston housing end aperture to the external flow channel.

11. The braking mechanism of claim 1 wherein the at least one braking wheel comprises a plurality of braking wheels.

12. The braking mechanism of claim 1 wherein the at least one braking wheel comprises two braking wheels.

13. (Currently Amended) A braking mechanism for a skate, the skate having a base skating surface with a base skating surface longitudinal axis, the braking mechanism comprising:

(a) at least one braking wheel disposed above the base skating surface, the at least one braking wheel being rotatable about a braking wheel axis disposed in a vertical plane, the vertical plane intersecting the base skating surface longitudinal axis at an angle of between about -5° and about +5°;

(b) a piston housing having piston housing side walls, a first piston housing section proximal to a first piston housing end and a second piston housing section distal to the first piston housing end, the first piston housing section defining a plurality of first piston housing section side wall apertures, the first piston housing section side wall apertures being disposed at a plurality of different distances from the piston housing first end, the second piston housing section comprising one or more second piston housing section side wall apertures, the first piston housing end also defining a piston housing end aperture;

(c) a piston disposed within the piston housing, the piston being mechanically connected to the at least one braking wheel such that the rotation of the at least one braking wheel moves the piston within the piston housing between (i) a first piston position wherein the piston is distal from the first piston housing end and wherein the piston is not adjacent to the first piston housing section side wall apertures, and (ii) a second piston position wherein the piston is proximal to the first piston housing end and the piston is adjacent to some or all of the first piston housing section side wall apertures, the piston having a first end and a second end, the first end comprising an internal piston flow channel and a slide valve disposed in the first end of the piston for controlling the flow of liquid from the piston flow channel to the first piston housing section, the piston further comprising one or more piston inlet channels for allowing the flow of liquid into the piston flow channel from the second piston housing section, the piston

flow channel having an open end at the first end of the piston and wherein the slide valve comprises a slidable plug slidably disposed and retained within the piston flow channel, the slidable plug comprising an elongate body and an end cap, the slidable plug being slidable between a first plug position wherein the end cap covers the open end of the piston flow channel and a second plug position wherein the end cap does not cover the open end of the piston flow channel, the end cap comprising a tapered projection aligned with the piston housing end aperture such that, when the piston is disposed in the second piston position, the tapered projection is disposed within the piston housing end aperture, so that when the piston is disposed in the second piston position, the tapered projection seals closed the piston housing end aperture, ~~the piston being mechanically connected to the at least one braking wheel such that the rotation of the at least one braking wheel moves the piston within the piston housing between (i) a first piston position wherein the piston is distal from the first piston housing end and wherein the piston is not adjacent to the first piston housing section side wall apertures, and (ii) a second piston position wherein the piston is proximal to the first piston housing end and the piston is adjacent to some or all of the first piston housing section side wall apertures,~~ the slide valve being adapted to close when the piston is moved from the first piston position to the second piston position and to open when the piston is moved from the second piston position to the first piston position;

(d) a slidable plug coil spring disposed within the internal piston flow channel for urging the slidable plug to the first plug position;

(e) a piston coil spring for urging the piston towards the first piston position, the piston coil spring being stronger than the slidable plug coil spring;

(f) sealing means for sealing the piston within the piston housing such that (i) liquid disposed in the first piston housing section cannot leak around the piston to the second piston housing section, and (ii) when the piston is moved

adjacent to one of the plurality of first piston housing section side wall apertures, liquid disposed in the first piston housing section cannot leak around the piston and out through that first piston housing section side wall aperture; and

(g) an external flow channel having a first end a second end, the first end of the external flow channel being in fluid tight communication with the first piston housing section via the first piston housing section side wall apertures and the first piston housing end aperture, the second end of the external flow channel being in fluid tight communication with the second piston housing section via the second piston housing section side wall apertures;

whereby, (i) when a liquid is disposed within the first piston housing section, the application of an axial force to the braking wheel causes the rotation of the at least one braking wheel and its braking wheel axis to thereby move the piston from the first piston position towards the second piston position, the slide valve is closed and the piston pressurizes liquid out of the first piston housing section via the first piston housing section side wall apertures, and into the second piston housing section via the second piston housing section side wall apertures, and (ii) when the axial force on the at least one braking wheel is released, the piston coil spring ~~first biasing means~~ urges the piston from the second piston position towards the first piston position, the slide valve is opened and liquid returns to the first piston housing section from the second piston housing section via the piston flow channel.

14. The braking mechanism of claim 13 wherein the first piston position can be adjusted by axially moving the second end of the piston.

15. The braking mechanism of claim 13 wherein the piston housing is disposed coaxially within an elongate body, the elongate body having a first end and a second end, the first end of the piston housing being disposed proximate to the first end of the elongate body, the piston housing being axially moveable

with respect to the elongate body between (i) a first piston housing position wherein the first end of the piston housing is not in abutment with the elongate body such that a channel is defined between the piston housing and the elongate body which connects the piston housing end aperture in fluid tight communication with the external flow channel and (ii) a second piston housing position wherein the first end of the piston housing is in abutment with the elongate body and no flow channel exists connecting the piston housing end aperture to the external flow channel.

16. A skate comprising:

(a) a skate boot; and

(b) a braking mechanism attached to the boot, the braking mechanism comprising:

(i) at least one braking wheel disposed above the base skating surface, the at least one braking wheel being rotatable about a braking wheel axis disposed in a vertical plane, the vertical plane intersecting the base skating surface longitudinal axis at an angle between about -5° and about +5°, the at least one braking wheel being affixed to the braking wheel axis;

(ii) a piston housing having piston housing side walls, a first piston housing section proximal to a first piston housing end and a second piston housing section distal to the first piston housing end, the first piston housing section defining a plurality of first piston housing section side wall apertures, the first piston housing section side wall apertures being disposed at a plurality of different distances from the piston housing first end, the second piston housing section comprising one or more second piston housing section side wall apertures;

(iii) a piston disposed within the piston housing, the piston having a first end and a second end, the first end comprising an internal piston flow channel and a slide valve disposed in the first end of the piston for controlling the flow of liquid from the piston flow channel to the first piston

housing section, the piston further comprising one or more piston inlet channels for allowing the flow of liquid into the piston flow channel from the second piston housing section, the piston being mechanically connected to the braking wheel such that the rotation of the at least one braking wheel moves the piston within the piston housing between (A) a first piston position wherein the piston is distal from the first piston housing end and wherein the piston is not adjacent to the first piston housing section side wall apertures, and (B) a second piston position wherein the piston is proximal to the first piston housing end and the piston is adjacent to some or all of the first piston housing section side wall apertures, the slide valve being adapted to close when the piston is moved from the first piston position to the second piston position and to open when the piston is moved from the second piston position to the first piston position;

(vi) a first biasing mechanism for urging the piston towards the first piston position;

(v) sealing means for sealing the piston within the piston housing such that (A) liquid disposed in the first piston housing section cannot leak around the piston to the second piston housing section, and (B) when the piston is moved adjacent to one of the plurality of first piston housing section side wall apertures, liquid disposed in the first piston housing section cannot leak around the piston and out through that first piston housing section side wall aperture; and

(vi) an external flow channel having a first end a second end, the first end of the external flow channel being in fluid tight communication with the first piston housing section via the first piston housing section side wall apertures, the second end of the external flow channel being in fluid tight communication with the second piston housing section via the second piston housing section side wall apertures.

17. The skate of claim 16 wherein the skate is an in-line roller skate.

18. The skate of claim 16 wherein the skate is an ice skate.